

# RWIS in Geislingen, South Germany helps to make the traffic safer

## Challenge

Geislingen City in Germany searched for a road weather info system to monitor a critical spot and to obtain gapless weather data in between fixed road weather stations to improve their service.

## Solution

Since early 2016, the city near Stuttgart has used a fixed weather info system equipped with the non-invasive ground sensor NIRS31 and a WS400 weather sensor. Additionally, they operate one mobile MARWIS.

## Benefits

The RWIS helps the city's road maintenance depot to optimize their daily work on the road, especially in winter. The system provides reliable data analysed by the browser-based ViewMondo software.

“The customer is very satisfied and plans to implement another, similar system”

*Simeon Neumann, Sales Manager - Lufft*



# Technologies used



LUFFT NIRS31



## Non-Invasive Road Sensor

Road weather sensor measuring wetness, frost/ice, snow, water layers, ice percentage & freezing point.



LUFFT MARWIS



## Mobile road weather sensor

The first mobile road sensor detecting conditions, friction, temperature, water, ice percentage and more.



LUFFT WS400



## Smart Weather Sensor

All-in-one weather sensor measuring temperature, humidity, precipitation intensity/type/quantity & air pressure.



LUFFT ViewMondo



## Management Software

Flexible software, that evaluates road weather data from both mobile and stationary road weather info systems.



# Case Study

In the South German City Geislingen, a road weather system has been providing important data on road weather conditions and environmental conditions since the beginning of 2016.



## NIRS31 FROM LUFFT

Launched in 2008, the NIRS31 was LUFFT's first non-contact road weather sensor that allows easy installation without road closures and costly construction work. It is therefore particularly suitable for the use on bridges where the installation of embedded ground probes entails structural risks. As bridges are usually exposed to stronger winds and the cooling and evaporation of the underlying water it makes sense to monitor them thoroughly.



[LEARN MORE ABOUT LUFFT NIRS31](#)

## RWIS in Geislingen, South Germany helps to make the traffic safer

A non-invasive NIRS31 ground sensor, a WS400 compact weather sensor and a camera are the most important components of the station. In addition, a MARWIS mobile road weather sensor is also in use, which provides additional information directly from the patrol vehicle.

The mobile as well as stationary measured values are evaluated and visualized with the help of the ViewMondo monitoring software from the Lufft IT

partner Informatik Werkstatt. The data are used for the organisation and optimisation of winter service carried out by the city's road maintenance depot. The project was handled by MICKS, which was completely integrated into Lufft in January 2018.

The customer is very satisfied with the station and is planning another similar system, which will soon be started and also carried out by the same project team from Lufft.



# Further NIRS31 Users

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Mexico

## The Mexican Ministry of Communications and Transport

LUFFT's Mexican partner Ingeniería Geofísica y Sistema S.A. de C.V. (IGS) modernized federal bridges and motorways in Querétaro, Mexico with new intelligent transport systems (ITS).



South Korea

## Korea Meteorological Administration

NIRS31 road weather sensors were installed on main roads in Pyeongchang, South Korea in 2012. The data have been publicly available public on the homepage of the Korea Meteorological Administration since January 26, 2013.



Germany

## Motorway Directorate Bavaria

The German A8 motorway is >291 km long and connects Munich with Karlsruhe. This route is monitored by 11 ice alert systems equipped with Lufft sensors. One of them can be discovered between Leonberg and Wendlingen.



Russia

## Highways throughout Russia

LUFFT's Russian Partner carried out long-term projects along the country's motorways incl. 98 Lufft systems with NIRS31, cameras and WS600 weather sensors. One of these stations is located on the M5/ "Ural" motorway.

